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ABSTRACT

This study analyzes the controversy of software piracy in education. It begins with a real world scenario that presents the setting and context of the problem. The legalities and background of software piracy are explained and true court cases are briefly examined. Discussion then focuses on explaining why individuals and organizations pirate software. The controversy of software piracy is examined through a cost benefit analysis. The two major stakeholders include the school district and the employees. The study investigates the pros and cons of pirating software from each stakeholder's point of view along with the probability of importance and occurrence. The final section of this report provides information on how to prevent software piracy. A table at the end of the document provides a quick reference table for analyzing piracy in education, providing information on stakeholder; power; costs of pirating, with probability of importance and probability of occurrence; and benefits of pirating, with probability of importance and probability of occurrence. (Contains 12 references.) (Author/AEF)

Analyzing Software Piracy in Education

by
Lee James Lesisko

May 19, 2003

Abstract

This study analyzes the controversy of software piracy in education. The author begins with a real world scenario that allows the reader to understand the setting and context of the problem. The legalities and background of software piracy are explained and true court cases are briefly examined. The author also attempts to explain why individuals and organizations pirate software.

The controversy of software piracy is examined through a cost benefit analysis. The two major stakeholders include the school district and the employees. This document investigates the pros and cons of pirating software from each stakeholder's point of view along with the probability of importance and occurrence. The final section provides information on how to prevent software piracy.

Vignette

The South Side District is a small rural public school in southeastern Pennsylvania with a population of 1,100 students. The community of South Side is a depressed area, and most individuals who reside there are either retired or on public assistance. District funding is very limited and property taxes are at an all time high.

Earlier this year, the Board of Education mandated that the district upgrade its computer technology equipment in your classroom. To satisfy this request, the Principal secured a federal technology grant to purchase twenty-five state-of-the-art multimedia workstations. Each system fully equipped with a monitor, keyboard, mouse, and hi-fi speakers. In addition, the vendor shipped twenty-five copies of the latest version of Microsoft Office XP which includes Word, Excel, PowerPoint and Access.

Knowing that you just received new systems, Mr. Jones, a colleague and good friend of yours, approaches you and asks for a copy of Office XP so he can upgrade the ten systems in his classroom. He also wants to upgrade his daughter's computer at home because her system has an old version of Microsoft Office as well.

Furthermore, Ms. Young, a business teacher with which you share your classroom, has requested that the district purchase a typing program to complement her business curriculum. She is a very conscientious educator and plans to use the software program to further develop the keyboarding skills of her students. However, due to the lack of revenue, the Principal indicated that she could not purchase any additional software. This response made Ms. Young very angry. The next morning she took matters into her own hands and purchased her own copy at Staples and installed it on all twenty-five systems.

This scenario leads to the following questions: Is it ethically correct to allow Mr. Jones to install Office XP on his ten classroom computers? Is it ethically and legally correct for Mr. Jones to take the latest version of XP from school and install it at home? Is Ms. Young ethically correct by bringing in locally purchased software and installing it on school computers?

Legalities and Background

Most people would never consider stealing something that did not belong to them. Nevertheless, those who copy software without the developer or author's permission are in fact, stealing someone else's property (Strikwerda and Ross, 1992). Developing a software application involves creative talents of many individuals such as programmers, writers, artists, and instructional designers. These individuals have a right to protect their intellectual property. Therefore, creative works such as software applications are protected by the United States Copyright Law.

When an individual purchases retail software, she does not become the owner of the copyright. Rather, she is purchasing the right to use the software under certain restrictions identified by the copyright owner. These terms are

usually printed on the software license agreement which is bundled and sold with the software application. Most often, the license agreement will state that the purchaser can load the application on to a single computer and make one backup copy for archival purposes only. However, there are special licenses available that allow the purchaser to install the application on multiple computers. This special agreement is usually called a site license or multi-user license. If an individual distributes, duplicates or installs the application (often called pirating) in a way that violates the license agreement, then it is considered copyright infringement (Business Software Alliance, 2002a).

In the previous scenario, both Mr. Jones and Ms. Young are in violation of the copyright law because they are infringing on the software developer's rights. An individual who violates an owner's copyright is subject to both civil and criminal penalties under the copyright law. Software theft is a serious matter. In addition to being sued by the copyright owner for damages and loss of profits, the infringer can be fined up to $250,000 or sentenced up to five years in prison or both (Business Software Alliance, 2002b; Underwood, 1998).

In 1991 the Community Unit School District 300 located in Carpentersville, Illinois settled out of court and paid $50,000 for having pirated copies of Adobe Acrobat and other applications installed on its microcomputer systems (Guerard, 2001). In a recent report published by the Business Software Alliance (BSA), an organization promoting anti-piracy indicated that in 2001, twenty-five percent of business software programs in the United States were pirated. In addition, forty-four businesses across seventeen states were cited by law officials and paid over $3.1 million to settle piracy claims (New Hampshire Review, 2002). BSA also reported that in 2001 software piracy cost application developers $1.8 billion in lost revenues. More specifically, the industry lost 118,000 jobs and $5.6 billion in wages. Despite stiff penalties, businesses and schools continue to pirate software.

From the viewpoint of the software manufacturer, there are many costs and benefits of legally pursuing software pirates. For example, a major drawback would be the lack of financial and personnel resources to investigate each reported incident. Furthermore, software piracy costs developers a loss of profits and sales, which can lead to a reduction in further product development. On the other hand, depending on the severity of the act, large settlements can be awarded. Other benefits include piece of mind and the satisfaction of having the power to make organizations and individuals pay for their wrongdoing.

Chion-Kenney (1984) reported that many individuals do not realize that copying software is a crime. This may explain why individuals engage in piracy. Claybaugh and Rozycki (2001) indicated that disputes often involve disagreements about facts. This may be another logical answer as to why individuals pirate software. Sivin and Bialo (1992) explained that the use of technology places a psychological distance between the individual and the situation. If we interact with others face-to-face and behave unethically, we experience the harm we inflict first-hand. The resulting feeling can reinforce normal behavior. However, when we copy software, the act feels less personal because we cannot see or hear the software developer, thus, making the act of

piracy easy to perform. The authors further suggested that students and educators need format and guidance concerning the ethical and legal implications of educational technology in general.

Analysis of Piracy

Analyzing software piracy in education can be accomplished by examining the players. On one hand we have the district itself, and on the other we have the individuals who are employed by the district. Each stakeholder has the power to freely copy software at will. For instance, behind closed doors the district can have a piece of software copied on to each computer in every building. Similarly, a teacher can copy a game on to his or her personal classroom computer without resistance. Both stakeholders can copy software as needed. However, there are many costs as well as benefits associated with software piracy.

From the district point of view, the costs can be devastating. If caught pirating software, there may be large fines and legal costs if the school is sued by the software author or developer. If the institution is reported, the probability of this matter being important and occurring is very high. This is because software developers can seek greater damages suing an organization than they could an individual. For example, in 1996 the Los Angeles Unified School District was cited for having illegal copies of Microsoft Word, WordPerfect and Adobe Photoshop installed on its microcomputers. As a result, the district was ordered to pay $300,000 in fines and an additional $4.5 million to replace the 1,400 copies of unlicensed software that spread throughout the classrooms (eSchool News, 1998). Since school budgets are tight, finding the necessary financial resources to pay for software piracy may be almost impossible. Therefore, if schools have to pay for software piracy, they may have to raise taxes and this will not sit well with the public. Piracy is not only an added cost to the district, but to the taxpayers as well. The probability of this matter being important to the school and occurring is very high, especially if the software piracy is widespread throughout the district. The more the district copies, the more it will have to compensate the author and the authorities.

Another cost to the district would be bad press coverage by the local television station and newspaper. When the media begins to report the facts, parents and community members will begin to scrutinize the district for unethical and illegal activities. Clearly, the district may begin to develop a bad reputation in the eye of the public. The probability of this being important and occurring is also very high.

Although there are many costs associated with piracy, there are also many benefits to an organization as well. For instance, by copying software, the school will save revenues which can be used to fund other programs and services that are needed throughout the district. Funding is of high importance and the probability of this occurring is also very high. Indeed, pirating software can save valuable financial resources.

Increased learning opportunities and serving the needs of the students are two more benefits to the organization. By copying software, students will receive

the benefit of utilizing the computer program. If funding is an issue and the district cannot afford the necessary software to complement instruction, why should the students suffer? Thus, software pirates believe that copying a program will not hurt. Besides, it is for educational purposes and it will clearly benefit all students in the district. Although this statement is true, software piracy is still illegal. Pirating software can also bring prestige to the district, especially if the organization lacks the necessary funding for software applications. In this case, the school would look good from the view of the public because the community members will believe that the district is being fiscally responsible, while at the same time securing expensive applications to educate children and youth. Increased learning opportunities, serving the needs of the students, and prestige are all high probabilities of importance and occurrence at the district level because they may provide positive community relations.

Analyzing software piracy from the viewpoint of the individual or school employee also has many associated costs and benefits, and this individual has just as much power to pirate as the district. For example, a teacher can bring in a software application from home and install it on his or her classroom microcomputer. So long as the individual is not reported performing this illegal activity, the benefits are high. On the other hand, if the person is caught, the costs will outweigh the benefits.

If a district employee is caught for software piracy, he or she will most likely be reprimanded in some way. The extreme case would be a loss of position or job. The probability of this being important is very high because school officials will need to show the public that the district is taking steps to rectify the situation so that it does not happen again. However, the probability of the extreme case occurring is very low.

Software piracy by one individual may involve others as well. For instance, if person "A" purchases and registers an application with the manufacturer and "B" copies it and gives it to "C", person "A" may be cited for software piracy if "C" gets caught because the software is registered to person "A". In this case more than one individual is involved. However, the probability of this being important is of only medium importance to the pirate, because software giants are reluctant to prosecute individual offenders based on the limited resources and damages that could be recovered. On the other hand, the probability of occurrence involving others in piracy is very high.

Individuals committing software piracy may feel guilt because of their dishonesty. Nevertheless, the probability of this being important and occurring is very low, because if it were high, individuals would most likely not pirate. Most software manufactures such as Microsoft, Novell, Adobe, and Symantec do not have the financial resources to investigate and prosecute each individual offender. However, they do seek large business organizations and schools because the piracy is usually widespread and the settlement can be very large. Thus, from the individual's perspective, the probability of getting caught is quite low compared to the organization. Therefore, the possibility of this issue being important and occurring at the individual level is very low. This may be another explanation of why individuals engage in software piracy activities.

There are many benefits of pirating software from the individual's point of view. For instance, having the ability to steal software may help to build an ego. An individual may receive personal satisfaction because he can copy software and also have the ability to feel that he received something for nothing. There is also a benefit of convenience of use because the individual does not have to purchase the software. These benefits are all high in probability of importance and occurrence to the individual employee because they may make him feel good inside.

Piracy Prevention

In order to reduce or eliminate piracy in schools, district officials must routinely provide its students and staff with information about the responsibilities and restrictions when using software. In addition, schools can perform routine internal software audits, purchase software monitoring tools, and develop a comprehensive district policy that addresses piracy (Underwood, 1998). A software piracy policy would most likely be part of a copyright, microcomputer, or computer network policy. The goals of the policy would be to protect the district from legal action by software copyright owners and to ensure the district is utilizing approved instructional software for educational purposes. Failure to comply with the guidelines and procedures of the policy may result in disciplinary action which could lead to, in extreme cases, termination from employment.

Rozycki (1999a) reported that policy is a rite of legitimacy and it restricts negotiation, supports equality, and reinforces organizational discipline. However, having a policy in place does not mean it is effectively working. To better understand policy, Rozycki (1999b) identified a model that can be used to analyze policy, utilizing a set of questions to evaluate how well it is working. For instance, is the policy effective? This may be a difficult question to answer. However, as mentioned previously, a major drawback of pirating software by an employee may be a loss of position or job. If an employee is caught pirating and he or she is terminated, then we can say the policy was effective because it produced the goal intended.

Is the policy efficient? In terms of piracy, the school staff will bear the costs of the policy. They will need to not only police themselves, but also their students and colleagues as well. A district with hundreds of computers can provide many opportunities for the misuse of software.

Are the policy costs and benefits fairly distributed? The answer to this question will depend on which side it is viewed from. For example, from the Board of Education perspective, the policy will protect the district from stealing software. This is clearly a benefit. On the other hand, from the school employee standpoint, monitoring students and their peers is an extra responsibility. Adding another responsibility could cause other classroom management tasks to be affected. Indeed, this is a cost.

Is the policy participatory? In order to develop a sound software piracy policy, many sources of reference must be considered. For instance, the Pennsylvania School Boards Association can be contacted for sample policies.

Business and industry may be able to provide vital information on how they handle piracy issues. School officials from nearby districts may be able to provide input on how they developed their piracy policies. Finally, consultation can be sought to ensure the policy falls well within legal limits.

Who has the responsibility to perform what actions? The responsibility of assuring a piracy policy meets its goals will depend on many individuals. For example, each staff member will be responsible for personally adhering to the policy procedures and guidelines. Each individual has the responsibility to monitor the utilization for violations with respect to his or her students and colleagues. School officials have a responsibility to ensure that each faculty member is following the policy. Finally, with the help of administration, the Board of Education has the responsibility to take action against those who violate the policy.

What motivators are provided for the actors to implement policy? One motivator is disciplinary action. Those individuals who violate the policy may be reprimanded or worse or be terminated from their current position. Individuals may also lose their privileges to use educational technology. Lastly, are the benefits worth the costs? The district will need to consider this question as they determine how technology will supplement instruction. Although there are added responsibilities with regard to a software policy, the benefits outweigh the costs. Utilizing technology in schools can increase academic achievement, motivate students, and enhance the learning process.

In order to ensure that instructional technologies are current and properly working, districts must continuously dedicate the necessary resources. This is another critical issue that needs to be considered. The local operating budget may not be enough to offset both its hardware and software costs. Therefore, districts must seek other ways to supplement the technology budget. This may be problematic.

Conclusion

Everyday educators are faced with the issue of properly using software in the classroom. Although copying software is a crime, many individuals and organizations do not see this illegal activity as a problem. Educators and school officials have a responsibility to ensure that the software utilized in the confines of the district conforms to the strict requirements of the author. In order to ensure its proper use, faculty, staff, students, and even parents need to be constantly reminded about the ramifications of piracy. In addition, school officials need to implement sound policies to deal with piracy offenders. If not, software piracy will continue to be a major concern in the United States and in other countries as well.

References

Business Software Alliance (2002a, September 9). Software industry teams with weekly reader to educate youth about cyber ethics and software piracy. Retrieved, October 3, 2002, from http://www.bsa.org/usa/press/newsreleases/2002-09-09.1280.phtml

Business Software Alliance (2002b). Software piracy and the law. Retrieved, October 15, 2002, from http://www.bsa.org/usa/freetools/consumers/swandlaw_c.phtml

Chion-Kenney, L. (1984, December 12). Piracy limits school market's growth, analysts say at parley. EducationWeek. Retrieved, October 15, 2002, from http://www.edweek.com/ew/ewstory.cfm?slug=05040016.h04&keywords=piracy

Claybaugh, G. & Rozycki, E. (2001). Analyzing controversy. NewFoundations Press. Oreland, PA.

eSchool News (1998, August 1). Alleged software piracy could cost LA schools $4.8 million. eSchool News. Retrieved, October 12, 2002, from http://www.eschoolnews.com/news/showStory.cfm?ArticleID=1050

Guerard E. B. (2001, November 1). District's $50k "piracy" settlement spurs policy changes. Retrieved, October 4, 2002, from http://www.eschoolnews.com/news/showStory.cfm?ArticleID=3028

New Hampshire Review (2002, June 14). Study sees rise in software piracy. *24*(12), 168.

Rozycki, E. (1999a).The analysis of policy: can philosophy help? Retrieved, October 16, 2002, from http://mywebpages.comcast.net/erozycki/AnalysisPolicy.html

Rozycki, E. (1999b). Models of policy: questions for analysis. Retrieved, October 16, 2002, from http://mywebpages.comcast.net/erozycki//PolicyTypes.html

Sivin, P. J, & Bialo, E. R. (1992). Ethical use of information technologies in education: important issues for America's schools. Department of Justice. Institute for Law and Justice, Alexandria, VA.

Strikwerda, R. A. &, Ross, J. M. (1992). Software and ethical softness. Collegiate Microcomputer 10(3) 129-136.

Underwood, J. (1998, April 1). Software pirates in your schools could make you walk the plank. eSchool News. Retrieved, October 14, 2002, from http://www.eschoolnews.com/news/showStory.cfm?ArticleID=1161

Analyzing Software Piracy in Education
Quick Reference

Stakeholder	Power	Costs of Pirating	Probability of Importance	Probability of Occurrence	Benefits of Pirating	Probability of Importance	Probability of Occurrence
School Entity (District)	High	Large fines and legal costs	High	High	Savings of financial resources	High	High
		Possibility of being reported	High	High	Increased learning opportunities	High	High
		Bad press in the public eye	High	High	Prestige	High	High
		Loss of reputation	High	High	Serving needs of the students	High	High
		May need to increase taxes	High	High	Students receive the benefit of using the software	High	High
Individual (Employee)	High	May lead to loss of position or job	High	Medium	Build up of ego	High	High
		Feeling of guilt or dishonesty	None	Low	Convenience of use	High	High
					Personal satisfaction	High	High
		Possibility of being caught	Low	Low	Ability to get something for nothing	High	High
		Involving others in piracy	Medium	High			

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